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absence of Renal Tubular cells was significantly associated with renal recovery ($p=0.047$). Moreover, there is a trend towards the association of the presence of Muddy Brown Casts and mortality ($p=0.066$).

Table 5. Association of Urine Microscopy Score with Patient's Outcome

Outcomes	Urine Microscopy Scoring System		p-value
	0 point n=20	1 to 5 n=82	
Dialyzed			
No	17(85%)	57(70%)	0.131
Yes	3(15%)	25(30%)	
Hemodialysis Discontinued			
No	2(10%)	12(15%)	0.500
Yes	1(5%)	13(16%)	
Mortality			
No	19(95%)	65(79%)	0.084
Yes	1(5%)	17(21%)	

Table 6. Association of Urine Microscopy Score with Cause of AKI

Cause of AKI	Urine Microscopy Scoring System		p-value
	0 point n=20	1 to 5 n=82	
Pre-renal			
Cardiorenal	7(35%)	14(17%)	0.075
Hepatorenal	0(0%)	7(9%)	0.206
Hypovolemia	5(25%)	13(16%)	0.255
Sepsis	8(40%)	41(50%)	0.291
Intrinsic			
Ischemic	0(0%)	8(10%)	0.163
Drug-induced	4(20%)	9(11%)	0.230
Uric Acid Nephropathy	1(5%)	1(1%)	0.355
Glomerulonephritis	0(0%)	3(4%)	0.516

Conclusions: The presence of Renal tubular epithelial cells, muddy brown casts and hematuria are associated with mortality and need for RRT. More importantly, there is a trend towards an association of a higher urine microscopy score with mortality. Septic AKI seems to have higher urine microscopy scores; this finding may imply that the urine microscopy scoring system may be most useful in septic AKI in predicting outcome.

No conflict of interest

POS-041

HAEMOLYTIC URAEMIC SYNDROME (HUS) WITH COVID-19 INFECTION: 2 CASE REPORTS. IS THERE A DIRECT LINK?

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Introduction: Microvascular injury, including thrombotic microangiopathy, has been widely reported as a hallmark pathological feature of organ injury in the setting of COVID-19. COVID-19 is also responsible for a wide variety of illnesses and presentations. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Others, especially the elderly and those with comorbidities, are more likely to develop serious illness with multi-organ involvement. This paper highlights 2 patients who were infected with COVID-19 and developed HUS at the Couva Hospital, Trinidad.

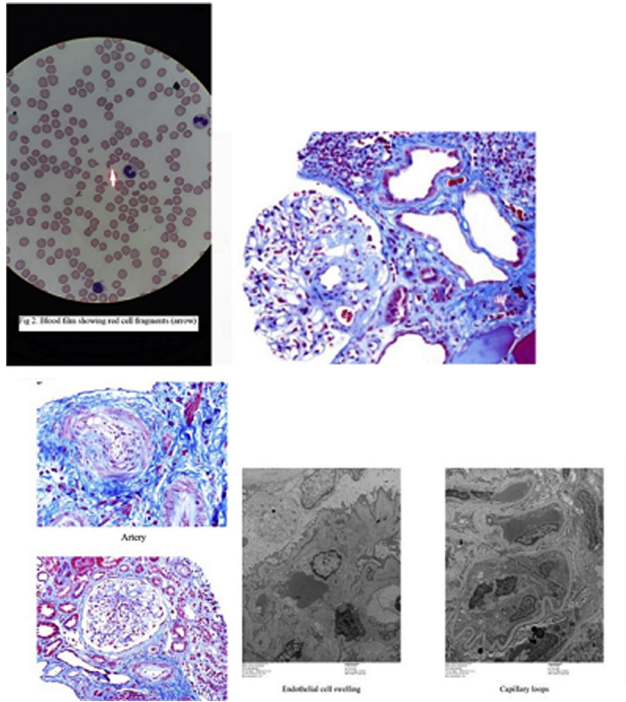


Methods: Case 1 is a 64-year-old female with no known past medical history presenting to the Accident and Emergency Department with a bushmaster pit viper snake envenomation. Three days later, represented to the emergency department with decreased urine output and severe renal impairment. COVID-19 antibody screening test was suggestive of infection, which was confirmed via nasopharyngeal swab rt-PCR. Case 2 is a 27-year-old male, with no previously known medical conditions, presented to the emergency department complaining of non-productive cough and dyspnoea for one week and associated fatigue. He was found to be in hypertensive emergency at presentation and tested positive for the coronavirus via nasopharyngeal swab rt-PCR. For both patients, tests for HIV, hepatitis B, hepatitis C, leptospirosis and dengue all returned negative. ANA was negative with normal C3 and C4. ADAMTS-13 activities were 63.7% and 76.4% for patients 1 and 2, respectively. Blood film was consistent with MAHA showing fragmented RBCs for both patients. Both were acutely dialysed and pulsed with methylprednisolone on initial presentation and then prednisolone 40mg daily which was to be tapered over 3 months. The renal function for patient 2, however, never recovered. He had a renal biopsy which showed features of thrombotic microangiopathy with significant interstitial fibrosis and tubular atrophy, as well as hypertensive changes (see below). Two months later, patient 2 is dialysis dependent and placed on the renal transplant list. Patient 1 had a slow renal recovery. She continued haemodialysis for 1 month, after which she showed marked improvement. Creatinine 2 months later is 2.5mg/dL.

Investigations	Case 1	Case 2
WBC (10 ³ /uL)	13.9	7.71
Hb (g/dL)	9.5	6.9
PLT (10 ³ /uL)	62	55
LDH (u/L)	3909	1094
CRP (mg/L)		47
BUN (mg/dL)	71	59
Cre (mg/dL)	7.0 (Prev 0.8)	8.32
PT	11.4	
PTT	26.37	
INR	1.03	1.00

Fig 1. Blood investigations on Admission

Results: Our patients had a negative screen for secondary causes of TMA. Severe hypertension remains a possible cause for patient in Case 2 (biopsy images below) but due to the unavailability of previous renal function tests, it is difficult to say if hypertension alone was the cause of his renal failure or a sequela. It is becoming increasingly recognised that complement activation and dysregulation has a role in the pathophysiology of the coronavirus. While coronavirus is not a widely recognised cause of TMA, Zhang et al reported cases of covid-19 patients having anaemia, thrombocytopenia and end organ damage which fit the clinical picture of a TMA. This brings into question, this virus as a possible aetiology for our patients' condition.



Conclusions: There is no definitive link between Coronavirus disease and HUS. It is hoped that this paper will bring awareness to the possibility of HUS presenting in susceptible patients infected with COVID-19 and lead to early identification and therefore early and successful management.

No conflict of interest

POS-042

COVID-19 INFECTION PRESENTING WITH RENAL INFARCTION DUE TO COVID ANGIOPATHY; A RARE PRESENTATION

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Introduction: COVID-19 disease has emerged as a global health challenge and has engulfed almost all countries since its origin in wuhan province of china. The kidney involvement is frequently reported, especially in critically ill hospitalized patients. Multiple mechanisms proposed for this damage range from direct invasion, cytokine storm, hemodynamic derangements and many others are still undergoing extensive research. COVID-19 has been described to have association with hypercoagulable state and thromboembolic events in major blood vessels. But renal infarction due to covid-19 infection is a rare occurrence. We here report a rare case of renal infarction due to COVID-19 infection

Methods: A 62-year-old man with no previous history of any significant medical illness presented to us with one week complain of low grade fever, cough, shortness of breath, and chest discomfort. One week before the onset of these complains, he had history of exposure to his son, working as a paramedical staff, who was found to be COVID-19 positive with only mild upper respiratory tract symptoms. This patient initially presented with one week history of fever, cough, and shortness of breath and was diagnosed with COVID-19 pneumonia.

Results: At time of admission this patient developed acute kidney injury requiring need of renal replacement therapy. During hospital stay he developed distension of abdomen with absence of bowel sounds and GI bleed. The CT angiography done for the evaluation of GI complains revealed a large perfusion defect in the lower part of the left kidney suggestive of left renal infarction.

Conclusions: In our patient, we hypothesized that severe COVID-19 pneumonia induced a prothrombotic state, resulting in embolization to renal artery, or there could have been an isolated neo-thrombosis in the renal artery as well. This thromboembolic pathology manifested with renal infarction. In conclusion, the thromboembolic consequences of

COVID-19 can occasionally result in rare complications such as renal infarction. During covid-19 pandemic, physicians should maintain a high degree of clinical suspicion to diagnose rare manifestations of this novel disease for timely management.

No conflict of interest

POS-043

INCIDENCE OF ACUTE KIDNEY INJURY AFTER OFF-PUMP CORONARY ARTERY BYPASS GRAFTING: SINGLE SURGEON, SINGLE CENTRE EXPERIENCE IN SRI LANKA

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Introduction: Coronary artery bypass graft surgery (CABG) has recognized as a golden treatment for patients with coronary artery disease (CAD) to prolong survival and to improve quality of life. Acute Kidney Injury (AKI) is an important risk factor for mortality following CABG. Advanced age, preoperative renal dysfunction, diabetes mellitus, congestive heart failure and use of cardiopulmonary bypass (CPB) are some key factors for AKI after CABG. Off pump coronary artery bypass grafting (OPCAB) eliminates the need for CPB and reduces the risk of AKI after CABG. AKI is defined as an absolute increase in S.cr $\geq 0.3\text{mg/dl}$ or more ($\geq 26.4 \mu\text{mol/L}$) within 48 hours. Due to limited published evidence, present study was aimed to determine the incidence of AKI and to evaluate associated risk factors for AKI following OPCAB.

Methods: The present prospective observational study was conducted among adult patients who underwent OPCAB by a single surgeon at a single center in Sri Lanka, between February to November 2020. Total of 133 patients underwent CABG were identified. Patients who underwent ONCAB (n=4), patients with end stage renal failure receiving hemodialysis (n=1) and Patients with incomplete data (n=9) were excluded. Remaining 119 patients were analyzed. Demographic, clinical, and laboratory data of pre-operative and post-operative (within 24hrs) serum creatinine values were collected. Written informed consent was obtained during admission. Known AKI risk factors were used to analyze for the possible association. The clinical outcome measure was the occurrence of AKI after OPCAB. All the data were statistically analyzed by SPSS version 25.0. Continuous variables present with mean \pm Standard deviation and categorical variables were expressed as percentages.

Results: The mean age of the participants was 58.70 ± 8.317 and ranged between 35-78 years. Among the patients 100 (84.03%) were males and 19 (15.97%) were females. Estimated Glomerular Filtration Rate (eGFR) $\geq 60 \text{ ml/min/1.73m}^2$ was considered as the normal value for pre-operative kidney function. A total of 73.1% (87/119) were with normal kidney function while 26.9% (32/119) were with impaired kidney function preoperatively. The incidence of AKI was 5.9% (7/119) after OPCAB and none of them were not indicated for renal replacement therapy or dialysis. Incidence of AKI was 2.5% (3/119) among patients with normal kidney function whereas 3.36% (4/119) among patients with impaired kidney function pre-operatively. Incidence of AKI was high among male patients, with hypertension, dyslipidemia, and decreased eGFR ranging between 45-49 mL/min/1.73m². There were no statistically significant risk factors associated with AKI after OPCAB in the present study.

Conclusions: Incidence of AKI following OPCAB relatively lower in the present study (4.9%) than previously reported (8-14%) but AKI that progress slowly couldn't be identified as S.cr values collected within a 24-hour window. Further large multicenter cohorts are recommended to validate present results.

No conflict of interest

POS-044

EPIDEMIOLOGICAL TRENDS IN COMMUNITY ACQUIRED ACUTE KIDNEY INJURY IN PAKISTAN: 25 YEARS EXPERIENCE FROM A TERTIARY CARE RENAL UNIT

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Introduction: Epidemiological studies of acute kidney injury (AKI) are sparse especially from South Asia. Reported incidences vary with use of